WHAT IS CLAIMED IS:

1. A reinforced composite material comprising:

a laminate panel;

a strengthening panel, the strengthening panel including a reinforcement embedded therein; and

a layer of adhesive disposed between the laminate panel and the strengthening panel to adhere the laminate panel and the strengthening panel together.

2. The reinforced composite material as set forth in Claim 1, in which the strengthening panel further includes a sheet of plastic.

3. The reinforced composite material as set forth in Claim 2, in which the reinforcement is embedded in the sheet of plastic.

4. The reinforced composite material as set forth in Claim 2, in which the sheet of plastic is at least partially formed of a polyester copolymer.

5. The reinforced composite material as set forth in Claim 1, in which the strengthening panel is a sheet of fiberglass reinforced plastic.

6. The reinforced composite material as set forth in Claim 1, in which the reinforcement includes a plurality of fibers of a reinforcing material.

7. The reinforced composite material as set forth in Claim 6, in which the plurality of fibers of the reinforcing material are one of randomly oriented and oriented in a mesh within the strengthening panel.

8. The reinforced composite material as set forth in Claim 6, in which the plurality of fibers of the reinforcing material are at least partially formed of glass.

9. The reinforced composite material as set forth in Claim 1, in which the layer of adhesive includes a layer of a material selected from the group consisting of contact cement and hot melt adhesive.

10. A reinforced composite material comprising:

a laminate panel;

a strengthening panel including a fibrous reinforcement embedded in a polymeric material; and

a layer of adhesive disposed between the laminate panel and the strengthening panel to adhere the laminate panel and the strengthening panel together.

11. The reinforced composite material as set forth in Claim 10, in which the fibrous reinforcement includes a plurality of fibers of glass.

12. A method of forming a reinforced composite material, the method comprising the steps of:

forming a laminate panel by heating and compressing at least a first layer of paper and quantity of resin;

forming a strengthening panel by embedding a reinforcement in layer of a binder material; and

adhering the laminate panel to the strengthening panel with a layer of adhesive.

13. The method as set forth in Claim 12, in which the step of forming a strengthening panel includes the step of providing a sheet of fiberglass reinforced plastic.

14. The method as set forth in Claim 12, further comprising the steps of applying a layer of hot melt adhesive between the laminate panel and the strengthening panel and curing the layer of hot melt adhesive.

15. A method of forming a reinforced composite material, the method comprising the steps of:

providing a laminate panel of a type made by heating and compressing at least a first layer of paper and quantity of resin;

providing a strengthening panel of a type made by embedding a reinforcement in layer of a binder material; and

adhering the laminate panel to the strengthening panel with a layer of adhesive.

16. The method as set forth in Claim 15, in which the strengthening panel is a sheet of fiberglass reinforced plastic.

17. The method as set forth in Claim 15, wherein said adhering step further comprises the steps of applying a layer of hot melt adhesive between the laminate panel and the strengthening panel and curing the layer of hot melt adhesive.

18. The method as set forth in Claim 15, wherein said adhering step further comprises the step of applying a layer of a contact cement between the laminate panel and the strengthening panel.